

Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

DEVAL L. PATRICK Governor MAEVE VALLELY BARTLETT
Secretary

DAVID W. CASH Commissioner

Date: July 29, 2014

Mr. Kenneth Joblon Brittany Dyeing & Printing Corp. 1357 E. Rodney French Blvd. New Bedford, MA 02744 **RE:** New Bedford

Transmittal No.: X260686 Application No.: SE-14-017

Class: *SM-50* FMF No.: 130019

AIR QUALITY PLAN APPROVAL

Dear Mr. Joblon:

The Massachusetts Department of Environmental Protection ("MassDEP"), Bureau of Waste Prevention, has reviewed your Limited Plan Application ("Application") listed above. This Application concerns the proposed alteration and operation of existing Marshall & Williams Tenter Frame No. 4 at your textile printing and finishing facility located at 1357 E. Rodney French Blvd. in New Bedford, Massachusetts ("Facility").

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control," regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-J, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator ("Permittee") must comply in order for the Facility to be operated in compliance with this Plan Approval.

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1. DESCRIPTION OF FACILITY AND APPLICATION

Brittany Dyeing and Printing Corporation (Brittany or Permittee) operates a textile printing and finishing facility in New Bedford, MA. Various textiles (e.g. cotton, polyester) are washed, dyed, printed, and finished to the customer's specifications. On March 16, 1994 the MassDEP approved Application No. 4P92012, submitted in accordance with 310 CMR 7.18(17)

Reasonable Available Control Technology which established volatile organic compound (VOC) "as applied" formulation limits for fabric print colors, fabric finishing mixtures and fabric dyeing formulations, daily VOC emission limits and twelve month rolling period VOC emission limits. In accordance with Final Approval No. 4P00026, issued on May 12, 2000, Brittany is not a major source of Hazardous Air Pollutants¹ (HAP) as defined in 40 CFR Part 63.2 and is not currently subject to the Regulations at 40 CFR Part 63, Subpart OOOO National Emission Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles.

Brittany is subject to a 50% Facility Emissions Cap as approved by the MassDEP on September 2, 2009. The 50% Facility Emissions Cap Approval restricts Brittany, on a facility-wide basis, to 5 tons HAP (single), 12.5 tons HAP (total), 25 tons of VOC, 25 tons of NO_x, 50 tons of any other regulated air pollutant per consecutive twelve month period.

The Permittee has proposed, in application No. SE-14-017, to install a Mascoe Model 5KC knife coater (or equivalent) on existing Tenter Frame No. 4. The new coating head will be designated as Frame 4C and will apply low VOC and low HAP process formulations (e.g. fabric finishing mixtures). Existing Tenter Frame No. 4 will continue to be used for conventional finish application(s) as previously approved in Application Nos. SM-85-110-IF and 4P92012. There will be no changes to the existing drying oven for Tenter Frame No. 4 which will continue to exhaust through an existing venturi scrubber No. 4 and a Beltran Model BTP-42 wet electrostatic precipitator (ESP No. 1) for control of visible emissions as approved in Application No. 4P89016. No physical or operational changes beyond what is listed in this approval have been proposed.

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¹ Hazardous Air Pollutants are as listed in the 1990 Clean Air Act (CAA) Amendments, Section 112(b).

2. EMISSION UNIT (EU) IDENTIFICATION

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

Table 1				
EU# Description		Design Capacity	Pollution Control Device (PCD)	
Frame 4C	Mascoe Model 5KC, or equivalent, knife coater	Maximum process formulation application: 1.25 lbs per linear yard	Existing	
Frame 4	Existing Marshall & Williams Tenter frame; natural gas fired, Calorex Drying Oven	200 linear yards per minute; 6.0 MMBtu/hr heat input	Venturi Scrubber No. 4 and Beltran Wet ESP No. 1	

Table 1 Key:

ESP = Electrostatic Precipitator EU# = Emission Unit Number

MMBtu/hr = million British thermal units per hour

No. = number

PCD = Pollution Control Device

lbs = Pounds

3. <u>APPLICABLE REQUIREMENTS</u>

A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2 below:

Table 2				
EU#	Operational / Production Limit	Air Contaminant	Emission Limit	
Frame 4C	VOC in process formulation(s) as applied to substrate shall not exceed 0.3 pounds per pound of solids applied.	VOC	≤ 0.3 lbs VOC per lb solids, as applied	
	2. VOC as contained in process formulation(s) applied is limited to 1.6 tons per month.	VOC	≤ 1.6 TPM	

Table 2					
EU#	Operational / Production Limit	Air Contaminant	Emission Limit		
	3. VOC as contained in process formulation(s) applied is limited to 4.8 tons per year.	VOC	≤ 4.8 TPY		
Frame 4C	4. HAP as contained in process formulation(s) applied is limited to 0.3 tons per month.	НАР	≤ 0.3 TPM		
	5. HAP as contained in process formulation(s) applied is limited to 1.6 tons per year.	НАР	≤ 1.6 TPY		

Table 2 Key:

EU# = Emission Unit Number

HAP = maximum single and/or total Hazardous Air Pollutants

lbs = pounds

TPM = tons per month

TPY = tons per consecutive12-month period

VOC = Volatile Organic Compounds

B. <u>COMPLIANCE DEMONSTRATION</u>

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5 below:

Table 3				
EU#	Monitoring and Testing Requirements			
Frame 4C	1. The Permittee shall monitor process formulation(s) applied on Frame 4C, including formulation data, to track usage and ensure compliance with operational and emission limits contained in Table 2.			
Frame 4C, Frame 4	 The Permittee shall, for the existing unmodified control equipment (i.e. Wet ESP 1 and Scrubber No. 4), continuously measure and record, at a minimum of every four hours while operating, the following operational parameters for existing ESP No. 1 and venturi scrubber No. 4: Secondary current (DC mA) Secondary voltage (DC kV) High Voltage (HV) Power (on/off) Fan (on/off) Scrubber liquid flow (on/off) The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration. 			

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Table 3			
EU#	EU# Monitoring and Testing Requirements		
	4. If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13		

Table 3 Key:

CMR = Commonwealth of Massachusetts Regulations

DC kV = direct current kilovolts DC mA = direct current milliamps ESP = Electrostatic Precipitator EU# = Emission Unit Number

USEPA = United States Environmental Protection Agency

	Table 4			
EU#	Record Keeping Requirements			
Frame 4C	1. The Permittee shall maintain a record of each process formulation (e.g. Manufacturer's formulation data, Safety Data Sheet, etc.) applied on Frame 4C to include, formulation density, VOC content by weight, total HAP content by weight, individual HAP content by weight and solids content by weight.			
	2. The Permittee shall maintain adequate records on-site to demonstrate compliance with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve month period (current month plus prior eleven months). These records shall be compiled no later than the 15 th day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at http://www.mass.gov/dep/air/approvals/aqforms.htm#report .			
Frame 4, Frame 4C	3. The Permittee shall, for the existing unmodified control equipment (i.e. Wet ESP 1 and Scrubber No. 4), maintain records of monitoring as required in Table 3 above.			
	4. The Permittee shall maintain records of any emission testing as required by Table 3.			
	5. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EU(s) and PCD(s) approved herein on-site.			
	6. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s), PCD(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.			
	7. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and PCD(s) and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.			

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Table 4				
EU#	Record Keeping Requirements			
	8. The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.			
	9. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.			
	10. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.			

Table 4 Key:

EU# = Emission Unit Number

ESP = Electrostatic Precipitator

HAP = Hazardous Air Pollutant(s)

No. = Number

PCD = Pollution Control Device

SOMP = Standard Operating and Maintenance Procedure

USEPA = United States Environmental Protection Agency

VOC = Volatile Organic Compound(s)

Table 5			
EU#	Reporting Requirements		
Frame 4, Frame 4C	1. The Permittee shall notify the Southeast Regional Office of MassDEP, BWP C&E Chief by telephone (508) 946-2878, or fax (508) 947-6557, as soon as possible, but no later than one (1) business day after discovery of a malfunction of Wet ESP 1 and Scrubber No. 4. A written report shall be submitted to C&E Chief at MassDEP within three (3) business days thereafter and shall include: identification of malfunction(s), duration of malfunction(s), reason for the malfunction(s), corrective actions taken, and action plan to prevent future malfunction(s).		
	2. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a "Responsible Official" as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).		
	3. The Permittee shall notify the Southeast Regional Office of MassDEP, BWP C&E Chief by telephone (508) 946-2878, or fax (508) 947-6557, as soon as possible, but no later than one (1) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to C&E Chief at MassDEP within three (3) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).		
	4. The Permittee shall report as required to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. The Permittee shall note therein any minor changes (under 310 CMR 7.02(2)(e), 7.03, 7.26, etc.), which did not require Plan Approval.		

Table 5				
EU#	Reporting Requirements			
	5. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan Approval within 30-days from MassDEP's request.			
	6. The Permittee shall submit to MassDEP for approval a stack emission pretest protocol, at least 30 days prior to emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.			
	7. The Permittee shall submit to MassDEP a final stack emission test results report, within 45 days after emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.			

Table 5 Key:

BWP = Bureau of Waste Prevention

C&E = Compliance and Enforcement

CMR = Code of Massachusetts Regulations

ESP = Electrostatic Precipitator

EU# = Emission Unit Number

4. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to, and shall comply with, the following special terms and conditions:

A. The Permittee shall comply with the Special Terms and Conditions as contained in Table 6 below:

Table 6					
EU#	Special Terms and Conditions				
Frame 4C	1. The Permittee shall post identifying information, e.g. 4C or Frame 4C, to clearly identify the new coating head that is being approved in this application.				
Frame 4C, Frame 4	2. The Permittee shall take any and all measures to ensure the operation of Frame 4C and existing Frame 4 does not result in conditions that cause or contribute to a condition of air pollution as defined at 310 CMR 7.00, due to odor or other contaminants.				
	3. The Permittee shall take any and all measures necessary such that the operation of Frame 4C and existing Frame 4 will not result in visible emissions (i.e. zero percent opacity) exclusive of uncombined water vapor. Opacity shall be measured at the ESP 1 emission stack.				
Frame 4	4. In accordance with VOC RACT approval No. 4P92012, excluding the coating head identified as Frame 4C, the Permittee shall continue to use fabric finishing mixtures that do not exceed 0.5 pound of VOC per pound of solids, as applied.				
Facility – wide	5. The Permittee shall continue to maintain the Odor Complaint and Assessment Log and procedures as established by Administrative Consent Order No. ACO-SE-07-7001, Amendment No. 2, dated June 1, 2009.				

Table 6				
EU#	EU# Special Terms and Conditions			
6. Any prior Plan Approvals issued under 310 CMR 7.02 shall remain in effect unless specifically changed or superseded by this Plan Approval. The Facility shall not exceed the emission limits and shall comply with approved conditions specified in the prior Plan Approval(s) unless specifically altered by this Plan Approval.				

Table 6 Key:

CMR = Code of Massachusetts Regulations

EU# = Emission Unit Number

ESP = Electrostatic Precipitator

No. = Number

RACT = Reasonably Available Control Technology

VOC = Volatile Organic Compounds

B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as "shanty caps" and "egg beaters." The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7 below, for the Emission Units that are regulated by this Plan Approval:

Table 7						
EU#	EU# Stack Height Above Ground (feet) Stack Inside Exit Velocity Range (feet per second) Stack Gas Exit Temperature Range (oF)					
Frame 4/ESP 1	72	3	16.4-43.0	80-120		

Table 7 Key:

ESP = Electrostatic Precipitator

EU# = Emission Unit Number

°F = Degree Fahrenheit

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).

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- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J. The Permittee shall conduct emission testing, if requested by MassDEP, in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13. If required, a pretest protocol report shall be submitted to MassDEP at least 30 days prior to emission testing and the final test results report shall be submitted within 45 days after emission testing.
- K. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

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MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain "Fail-Safe Provisions," which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Enclosed is a stamped approved copy of the application submittal.

Should you have any questions concerning this Plan Approval, please contact Peter Russell by telephone at 508-946-2821, or in writing at the letterhead address.

Sincerely,

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This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Thomas Cushing Permit Chief Bureau of Waste Prevention

Enclosure

ecc: New Bedford Dept of Health

New Bedford Fire Department Robert Cruise, Brittany MassDEP/Boston - Yi Tian

MassDEP/SERO - Maria Pinaud, Laura Black, Peter Russell